



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/052,325	03/31/1998	JOHN E. STOCKENBERG	EMC-97-137	9015
24227	7590	03/11/2005	EXAMINER	
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748				COLBERT, ELLA
		ART UNIT		PAPER NUMBER
		3624		

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/052,325	STOCKENBERG ET AL.
	Examiner	Art Unit
	Ella Colbert	3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 07 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 are pending. Claims 1 and 7-9 have been amended in this communication filed 12/07/04 entered as Response After Non-Final Action.
2. The 35 U.S.C. 112 second paragraph rejection is hereby withdrawn for claims 1, 8, 9 and 10. The 35 U.S.C. 112 second paragraph rejection remains for claim 17 as set forth here below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 17, lines 11-13 recite "wherein the first and second processes are configured to determine in which of the first communication mechanism and the second communication mechanism communications from either one of the first and second processes originate; and". It is unclear what the Applicants' are trying to say in the claim language. Do Applicants' mean "... communication mechanisms and the second communication mechanisms communicates from either the first and second processes where it originated; and"?

Drawing Objection

5. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because due to a scanning problem with the electronic file, figures 1, 2, 4, 4A, and 5-7 do not have legible labels on the drawing figures or numbers for the parts of

the drawing. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,544,347) Yanai et al, hereafter Yanai in view of (US 6,092,066) Ofek.

With respect to claim 1, Yanai teaches, teaches, at least one first communication mechanism residing on both the first and second computers for facilitating communications between the first and second processes that are each used with backup or restore operations over the network (col. 4, lines 43-65 and fig. 1); a second communication mechanism residing on both the first and second computers for facilitating communication between the first and second processes through the data storage system (col. 2, lines 37-67, col. 3, lines 1-40 and fig. 1 (36, 42, and 40)). Yanai fails to teach, means within the first and second processes for allowing the first and second processes to determine whether a communication is to be facilitated between the first and second processes is from the first or second communication mechanism,

and, in response to determining that a communication is from said first communication mechanism, facilitating the communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism facilitating the communication between the first process and the second process through said data storage system. Ofek teaches, means within the first and second processes for allowing the first and second processes to determine whether a communication is to be facilitated between the first and second processes is from the first or second communication mechanism, and, in response to determining that a communication is from said first communication mechanism, facilitating the communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism facilitating the communication between the first process and the second process through said data storage system (col. 3, lines 27-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a means within the first and second processes for allowing the first and second processes to determine whether a communication is to be facilitated between the first and second processes is from the first or second communication mechanism, and, in response to determining that a communication is from said first communication mechanism, facilitating the communication between the first process and the second process over said network, and, in response to determining that a communication is from said second communication mechanism facilitating the communication between the first process and the second process through said data

Art Unit: 3624

storage system and to modify in Yanai because such a modification would allow Yanai to have a communication interface linked to the communication interface of the first and second computer system for facilitating processes over a network.

With respect to claim 14, this dependent claim is rejected for the similar rationale given above s for claim 1.

With respect to claim 17, this independent claim is rejected for the similar rationale as given to claims 1 and 14.

8. Claims 2-16 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,544,347) Yanai et al, hereafter Yanai in view of (US 6,092,066) Ofek and further in view of (US 5,889,943) Ji et al, hereafter Ji.

With respect to claim 2, Yanai teaches, the first and second processes are part of a backup or restore process (col. 6, lines 16-50).

With respect to claim 3, Yanai and Ofek failed to teach, at least one first communication mechanism is a network socket. Ji teaches, at least one first communication mechanism is a network socket (col. 6, lines 28-31 and col. 8, lines 36-44). Network communications and socket calls used over the network are well known to anyone skilled in the art, as described in Applicants' Specification on page 18. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the first communication mechanism as a network socket and to modify in Yanai in view of his teachings of a high speed communication link to a disk adapter and point-to-point communication links and because such a modification

would allow Yanai to have a gateway node for controlling the transfer of files to and from a given network.

With respect to claim 4, Yanai teaches, the second communication mechanism is a data storage system socket (col. 4, lines 56-65).

With respect to claim 5, Yanai teaches, the backup and restore operations are capable of backing up and restoring information from a file system (col. 6, lines 37-67 and col. 7, lines 1-13). However, Yanai does not specifically disclose the system is a file system but a data storage system can be used to store files (defined as "blocks of information stored on disk, tape, or similar media containing a program, a document, or a collection of data").

With respect to claim 6, Yanai failed to teach, (a) establishing at least one first connection over a network between first and second processes that are each used with backup or restore operations and that are each residing on different computers, wherein, in response to determining if a communication is from the first communication mechanism then communicating over the network and in response to determining if a communication is from the first communication mechanism then communicating through the data storage system and (b) establishing in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system. Ji teaches, (a) establishing at least one first

Art Unit: 3624

connection over a network between first and second processes that are each used with backup or restore operations and that are each residing on different computers, wherein, in response to determining if a communication is from the first communication mechanism then communicating over the network and in response to determining if a communication is from the first communication mechanism then communicating through the data storage system (col. 8, lines 18-24 and lines 53-58). Ji fails to teach, (b) establishing in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system. Ofek teaches, (b) establishing in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system (col. 5, lines 25-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to establish in parallel with at least one first connection a second connection through a data storage system between the first and the second processes, wherein the second connection is configured to be responsively used for communication over the data storage system and to modify in Yanai because such a modification would allow Yanai to connect to a client and then to a server where the data is stored on a network.

With respect to claim 7, Yanai and Ofek failed to teach, creating a first pair of communication mechanisms on a designated port of each of said different computers, wherein the first pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers. Ji teaches, creating a first pair of communication mechanisms on a designated port, of each of said different computers, wherein the first pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers (col. 11, lines 14-53). It would have been obvious to one having ordinary skill in the art at the time the invention was made to creating a first pair of communication mechanisms on a designated port, of each of said different computers, wherein the first pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and to modify in Yanai because such a modification would allow Yanai to have a first command port for communication between client task(s) and the SMTP proxy server and the SMTP proxy server spawns an SMTP daemon or SMTP server.

With respect to claim 8, Yanai and Ofek failed to teach, requesting the first communication mechanism pair a connection to the second communication mechanism pair and in response to the connection request, accepting the connection request. Ji teaches, requesting the first communication mechanism pair a connection to the second communication mechanism pair (col. 10, lines 6-29) and in response to the connection request, accepting the connection request (col. 10, 31-34 and lines 49-55).

This dependent claim is also rejected for the similar rationale as claim 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to request the first communication mechanism pair a connection to the second communication mechanism pair and in response to the connection request, accepting the connection request and to modify in Yanai because such a modification would allow Yanai to have a data transfer request and file name sent first to the FTP daemon and then on to the server.

With respect to claim 9, Yanai and Ofek failed to teach, creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein the second pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein the second pair of communication mechanisms is used for transferring a different type of information than would be transferred over the first pair of

communication mechanisms. Ji teaches, creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein the second pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein the second pair of communication mechanisms is used for transferring a different type of information than would be transferred over the first pair of communication mechanisms (col. 10, lines 54-55 and col. 11, lines 4-53).

This dependent claim is also rejected for the similar rationale given for claim 7. It would have been obvious to one having ordinary skill in the art at the time the invention was made to creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein the second pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein the second pair of communication mechanisms is used for transferring a different type of information than would be transferred over the first pair of communication mechanisms and to modify in Yanai because such a modification would allow Yanai to send the file through the third poet to the FTP proxy server and through the second port on the FTP proxy server and finally through the first port to the client task.

With respect to claim 10, Yanai and Ofek failed to teach, requesting with the first communication mechanism of the second pair of communication mechanisms, a connection to the second communication mechanism of the second pair of communication mechanisms. Ji teaches, requesting with the first communication mechanism of the second pair of communication mechanisms, a connection to the second communication mechanism of the second pair of communication mechanisms (col. 12, lines 1-17).

This dependent claim is rejected for the similar rationale given for claim 8. It would have been obvious to one having ordinary skill in the art at the time the invention was made to request the first communication mechanism of the second pair of communication mechanisms, a connection to the second communication mechanism of the second pair of communication mechanisms and to modify in Yanai because such modification would allow Yanai to transmit through the second command port to the SMTP daemon and to create a third command port and to bind the server task to the third command port to establish communications between the server and the SMTP daemon.

With respect to claim 11, Yanai and Ofek failed to teach, creating a third pair of communication mechanisms on a second designated port, wherein the third pair includes a first communication mechanism and a second communication mechanism. Ji teaches, creating a third pair of communication mechanisms on a second designated port, wherein the third pair includes a first communication mechanism and a second communication

Art Unit: 3624

mechanism (col. 8, lines 59-67 and col. 9, lines 1-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to create a third pair of communication mechanisms on a second designated port, wherein the third pair includes a first communication mechanism and a second communication mechanism and to modify in Yanai because such a modification would allow Yanai to have a third command port to the SMTP daemon with the SMTP daemon creating a third command port for communication with the SMTP daemon for transmission through the third command port to the server task..

With respect to claim 12, Yanai and Ofek failed to teach, requesting the first communication mechanism of the third pair of communications mechanisms a connection to the second pair of communications mechanisms. Ji teaches, requesting the first communication mechanism of the third pair of communications mechanisms a connection to the second pair of communications mechanisms (col. 8, lines 18-54).

This dependent claim is rejected for the similar rationale given for claims 8, 10, and 11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to request the first communication mechanism of the third pair of communications mechanisms a connection to the second pair of communications mechanisms and to modify in Yanai because such a modification would allow Yanai to perform file transfers from a controlled domain of a network across a medium to another network (a file

transfer from a node of the second network across the media to a second node of the third network).

With respect to claim 13, Yanai teaches, receiving information about a group of resources in the data storage system (col. 4, lines 50-56). Yanai and Ofek failed to teach, in response to receiving information about the group of resources, creating a fourth pair of communication mechanisms, wherein the fourth pair includes a first communication mechanism and a second communication mechanism and connecting the first communication mechanism and the second communication mechanism of the fourth pair of communication mechanisms to each other through the data storage system. Ji teaches, in response to receiving information about the group of resources, creating a fourth pair of communication mechanisms, wherein the fourth pair includes a first communication mechanism and a second communication mechanism (col. 9, lines 51-67); and connecting the first communication mechanism and the second communication mechanism of the fourth pair of communication mechanisms to each other through the data storage system (col. 10, lines 18-31 and lines 49-55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have in response to receiving information about the group of resources, creating a fourth pair of communication mechanisms, wherein the fourth pair includes a first communication mechanism and a second communication mechanism and connecting the first communication mechanism and the second

communication mechanism of the fourth pair of communication mechanisms to each other through the data storage system and to modify in Yanai because such a modification would allow Yanai to have the file transferred through the proxy server through the first port to the client task then the task is passed from the client to the FTP proxy server, then to the FTP daemon and to the server task which in response sends the file through the third port to the FTP daemon and through the second port on to the FTP proxy server and finally through the first port to the client task.

With respect to claim 15, Yanai teaches, identifying resources on a data storage device to be used in order to transfer information through the data storage device (col. 2, lines 57-67 and col. 3, lines 1-10).

This claim is also rejected for the similar rationale given for claims 6 and 13.

With respect to claim 16, this dependent claim is rejected for the similar rationale given to claim 5.

With respect to claim 18, this dependent claim is rejected for the similar rationale as given above for claim 3.

With respect to claim 19, this dependent claim is rejected for the similar rationale as given above for claim 4.

With respect to claim 20, this dependent claim is rejected for the similar rationale as given above for claim 5.

Response to Arguments

9. Applicants' arguments with respect to claims 1-20 have been considered but are not persuasive. The Examiner has accordingly addressed what is considered to the issues and arguments as set forth here below.

Issue no. 1: Applicants' argue: There is no motivation in the references for the combination suggested by the Examiner and, since each reference does not teach what the Examiner states it teaches, the combination certainly cannot teach what the Examiner states it teaches has been considered but is not persuasive.

Response: In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Yanai teaches, one first communication mechanism residing on both the first and second computers for facilitating communications between the first and second processes that are used for backup and restore operations over the network, a second communication mechanism residing on both the first and second computers for facilitating communication between the first and second processes through the data storage system, the first and second processes being part of a backup and restore process, a second communication mechanism is a data storage system socket, the

backup and restore operations are capable of backing up and restoring information from a file system, receiving information about a group of resources in the data storage system, and identifying resources on a data storage device to be used in order to transfer information through the data storage device, Ofek teaches means within the first and second processes for allowing the first and second processes to determine whether the communication from the first and second processes is from the first or second communication mechanism, and Ji teaches the first communication mechanism is a network socket, establishing at least a first connection over a network between first and second processes that are used with backup and restore operations and that reside on different computers and if the response is from the first communication mechanism communicating through the data storage system, creating a first pair of communication mechanisms on a designated port, where the first pair includes a first communication mechanism and a second communication mechanism, and accepting a connection request for the first communication mechanism pair and a connection to the second communication pair. It is interpreted that the combination of Yanai, Ofek, and Ji teach Applicants' invention.

Issue no. 2: Applicants' argue: Yanai does not teach what the Examiner states that he teaches because Yanai does not teach a system having first and second processes residing on first and second computers, the first and second processes being used with at least one backup and restore operation, ... and the Examiner has not pointed out the first and second computers taught by Yanai that have first and second processes or are in communication with both a data storage system which stores data

from at least the first and second computers and a network has been considered but is not persuasive. Response: Yanai is interpreted as teaching a system having first and second processes residing on first and second computers (data storage disk drives and maintaining a copy or mirror of a data storage disk at a location geographically remote from the main first computer or primary storage device –col. 1, lines 28-31 and users can maintain copies of their data on site either by removable storage media, or in a secondary “mirrored” storage device (second computer) located on or within the same physical confines of the main storage device. Should a disaster occur, both the primary as well as the secondary or back up data are requiring the remote storage of backup data by users –col. 1, lines 50-59. Yanai has two systems, one for primary storage and one for secondary storage which is interpreted as two computers also shown in figure 1.

Issue no. 3: Applicants' argue: Yanai does not teach at least one first communication mechanism residing on each of the first and second computers facilitating communications ..." has been considered but is not persuasive. Response: It is interpreted that Yanai's communication mechanism residing on each of the first and second computers facilitating communications ... is shown in figure 1 (12, 18, 24, 58, 60, 52, 56, 40, 38, and 70), col. 4, line 6 –col. 6, line 4 and lines 37-65. Yanai teaches a "remote system" which is interpreted as a "network".

Issue no. 4: Applicants' argue: there is not teaching of communication over a network as well as communication through a data storage system between two systems has been considered but is not persuasive. Response: In response to applicant's argument that the references fail to show certain features of applicant's invention, it is

noted that the features upon which applicant relies (i.e., "communication over a network as well as communication through a data storage system between two systems") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). These features as addressed above are not interpreted as being suggested or disclosed in the claim limitations.

Issue no. 5: Applicants' argue: Ofek teaches one connection between local system 10 and the remote system 11 and there is no second connection, and especially no second connection through a data storage system has been considered but is not persuasive. Response: Ofek has a network, a communications link 12 that interconnects the local system 10 and remote system 11 and a channel director 17 in col. 4, lines 34-67.

Issue no. 6: Applicants' argue: Even if the references were combined, the combination would not teach the invention recited in independent claim 17 has been considered but is not persuasive. Response: This issue and argument has been discussed above in issue no. 1 and there is no further need to readdress this issue and argument.

Issue no. 7: Applicants' argue: The combination of Ji and Ofek to modify Yanai to come up with the invention recited in independent claim 6, as set forth above, the references do not teach or suggest the claimed invention, alone or in combination, and because there is no motivation to combine the references has been considered but is

not persuasive. Response: The combining of the references used in the claims rejections has been discussed above in issue no. 1. There is no need to readdress this issue and argument again. As for the motivation, Rationale may be in a reference or reasoned from common knowledge in the art, scientific principles, art-recognized equivalents, or legal precedent". The reason or motivation to modify the reference may often suggest what the inventor has done but for a different purpose or to solve a different problem. It is not necessary to achieve the same advantage or result discovered by Applicants'. *In re Linter*, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972). See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988) (references do not have to explicitly suggest combining teachings); and *Ex parte Levingood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993) (reliance on logic and sound scientific reasoning). MPEP 2144.

Conclusion: In this rejection of claim 1 and others, for example under Section 103 (a) of Title 35 of the United States Code, the Examiner carefully drew up a correspondence between the Applicants' claimed limitations and one or more referenced passages in the Yanai, Ofek, and Ji references, what is well known in the art, and what is known to one having ordinary skill in the art (the skilled artisan). The Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the Specification (see below):

2111 Claim Interpretation; Broadest Reasonable Interpretation [R-1]

>CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 162 USPQ 541,550-51 (CCPA 1969).<

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

There are outstanding 35 U.S.C. 112, second paragraph issues with the claims as addressed above which need clarification in the claim language and Applicants' need to particularly point out and to claim the novel feature of their invention in the independent claims. Where is this feature claimed in claims 1, 6, 15, and 17?

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to Applicants' disclosure.

Beukema et al (US 5,146,605) disclosed control commands are distinguished from bus commands from other bus communications executed by a control facility.

Blackwell et al (US 4,710,870) disclosed a computer backup system.

Berger et al (EPO 0303856B1) disclosed a means with a dual copy function.

Beukema et al (EPO 0316251 A2) disclosed a multiprocessor network.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiries

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ella Colbert whose telephone number is 703-308-7064. The examiner can normally be reached on Monday-Thursday, 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1038. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



E. Colbert
March 3, 2005